

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A propylene-based polymer comprising a propylene represented by the following characteristics (1) to (3):

(1) ~~The~~ the weight-average molecular weight M_w is from not smaller than 5,000 to less than 1,000,000 as measured by GPC;

(2) ~~In ^{13}C -NMR,~~ ^{13}C -NMR peaks derived from the carbon atom in a methyl group in a propylene unit chain formed by head-to-tail bond are observed and, wherein when the chemical shift of the top of a peak assigned to a pentad represented by mmmm is 21.8 ppm, the ratio of the area S_5 of the peak having its top at 21.8 ppm to the total area S of peaks appearing within a range of from 19.8 ppm to 22.2 ppm is from not smaller than 10% to not greater than 60%, and, wherein when the area of a peak having its top at 21.5 to 21.6 ppm is S_6 , the relationship $4 + 2S_5/S_6 > 5$ can be established; and

(3) ~~Regio~~ regio irregular units based on 2,1-inserted propylene monomer and/or 1,3-inserted propylene monomer are present in its main chain and the sum of the ratio of regio irregular units based on 2,1-insertion and 1,3-insertion to all propylene insertions is not smaller than 0.05%;

wherein the propylene-based polymer has no melting point.

Claim 2 (Previously Presented): The propylene-based polymer as claimed in Claim 1, wherein the propylene-based polymer is a propylene polymer or propylene-olefin copolymer.

Claim 3 (Original): The propylene-based polymer as claimed in Claim 2, wherein the propylene-olefin copolymer is a copolymer of propylene and ethylene.

Claim 4 (Currently Amended): The propylene-based polymer as claimed in Claim 1, having the following characteristic (4):

(4) ~~In ^{13}C -NMR,~~ ^{13}C -NMR peaks derived from the carbon atom in a methyl group in a propylene unit chain formed by head-to-tail bond are observed and, wherein when the chemical shift of the top of a peak assigned to a pentad represented by mmmm is 21.8 ppm and the integrated intensity of peaks appearing at from 24.5 ppm to 25.0 ppm, from 33.5 ppm to 34.2 ppm, from 14.2 ppm to 23.5 ppm and from 27.5 ppm to 28.0 ppm are S_1 , S_2 , S_3 and S_4 , respectively, the following relationship can be established:

$$0 < (S_1 + S_2)/(S_1 + S_2 + S_3 + 0.5S_4) < 0.05.$$

Claim 5 (Currently Amended): The propylene-based polymer as claimed in Claim 3, ~~wherein~~ wherein when the propylene unit is represented by P, the 2,1-inserted propylene unit is represented by ^1P and the ethylene unit is represented by E, no partial structures represented by PEE, ^1PEE , EEE, EPE and E^1PE are present or the total ratio of the partial structures is not greater than 3% of that of all triads formed by P, ^1P and E.

Claim 6 (Currently Amended): The propylene-based polymer as claimed in Claim 1, wherein the weight-average molecular weight Mw is from not smaller than 5,000 to less than 200,000 as measured by GPC and the polymer is a polymer comprising propylene as a monomer.

Claim 7 (Previously Presented): The propylene-based polymer as claimed in Claim 1, wherein both the regio irregular units based 2,1-inserted propylene monomer and 1,3-inserted propylene monomer are present in the main chain.

Claim 8 (Previously Presented): The propylene-based polymer as claimed in Claim 1, wherein both the regio irregular units based 2,1-inserted propylene monomer and 1,3-inserted propylene monomer are present in the main chain and the ratio of said regio irregular units based on 1,3-insertion to all propylene insertions is greater than the ratio of said regio irregular units based on 2,1-insertion to all propylene insertions.

Claim 9 (Previously Presented): The propylene-based polymer as claimed in Claim 1, which is produced in the presence of a single site catalyst.

Claim 10 (Original): The propylene-based polymer as claimed in Claim 9, wherein the single site catalyst is a C_1 -symmetrical ansa-metallocene compound containing a transition metal and having a bridging group.

Claim 11 (Original): The propylene-based polymer as claimed in Claim 10, wherein the transition metal is titanium, zirconium or hafnium.

Claim 12 (Previously Presented): The propylene-based polymer as claimed in Claim 1, comprising an insoluble content of not greater than 1% by weight as dissolved in heptane at 98°C in a concentration of 10% by weight.

Claim 13 (Previously Presented): The propylene-based polymer as claimed in Claim 1, comprising an insoluble content of not greater than 1% by weight as dissolved in toluene at 25°C in a concentration of 10% by weight.

Claim 14 (New): A polypropylene-based polymer aqueous dispersion, which comprises:

the polypropylene-based polymer as claimed in Claim 1 and
an aqueous solvent.

Claim 15 (New): A method, which comprises:

applying the polypropylene-based polymer aqueous dispersion as claimed in Claim 14
to a molded product.

Claim 16 (New): A molded product, which comprises:

the polypropylene-based polymer as claimed in Claim 1 and
a base material.

Claim 17 (New): The molded product as claimed in Claim 16, wherein the base
material is selected from the group consisting of an α -olefin polymer and an α -olefin
copolymer.

Claim 18 (New): The molded product as claimed in Claim 16, wherein the base
material is a material selected from the group consisting of polyethylene, middle-low
pressure polyethylene, polypropylene, poly-4-methyl-1-pentene, poly-1-butene and
polystyrene.

Claim 19 (New): The molded product as claimed in Claim 16, wherein the base
material is a material selected from the group consisting of an ethylene-propylene copolymer,
an ethylene-butene copolymer, and a propylene-butene copolymer.

DISCUSSION OF AMENDMENT

Claims 1-13 are pending.

Claims 1 and 4 are amended in order to improve readability.

Claim 1 is also amended to include the limitation "wherein the propylene-based polymer has no melting point." Support for this limitation is found on page 69, lines 4-5. Additional support is found in the specification on page 92, line 6 (Ex. 1); page 93, line 19 (Ex. 2); page 98, line 5 (Ex. 3); page 101, line 21 (Ex. 4); page 104, line 20 (Ex. 5); and page 107, line 9 (Ex. 6).

Claim 6 is amended to include the expression "a polymer comprising propylene as a monomer." Support for this amendment is found on the paragraph spanning pages 11-12 of the specification.

Claims 14-19 are added. Claims 14-19 are supported in the specification as indicated in the following table.

Claim(s)	Support
14	page 80, lines 4-7
15	page 83, lines 24-26
16	page 83, line 24 – page 84, line 1
17-19	page 84, lines 5-12

No new matter is believed to be added upon entry of the amendment.

Upon entry of the amendment, Claims 1-19 will be active.